

2009 Calamus Reservoir and Gracie Creek Pond Creel Survey Summary

Northeast Fisheries Region

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Calamus Reservoir Summary

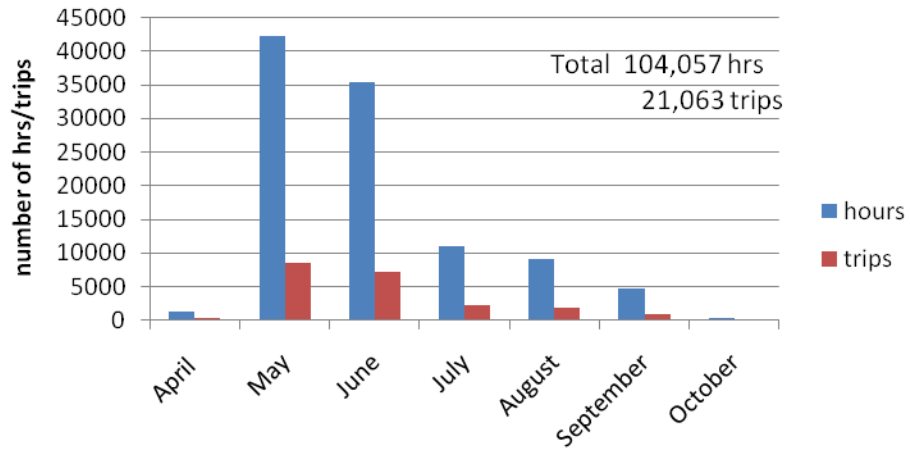
An angler creel survey was conducted in 2009 from April through October in cooperation with the University of Nebraska-Lincoln Fish Co-op Unit. A random, stratified roving creel design was utilized to include 20 count and interview days per month. For each randomly selected creel day, a count was made for all anglers and as many individual interviews conducted as possible. In all, 140 days were counted and creeled with a total of 1,476 angler interviews. The following text and charts contain data summaries for angler effort and angler catch by select species. Also, comparisons are made for data collected from previous creels at the reservoir. Previous creel surveys were conducted in 1998, 2000, 2001, 2003 and 2006. Previous creels were designed for 10 creel days per month. The current design of 20 days per month should improve data accuracy and reduce confidence limits and error. Also, many more interviews are conducted which provides better data on harvested fish including length information.

Angler Pressure

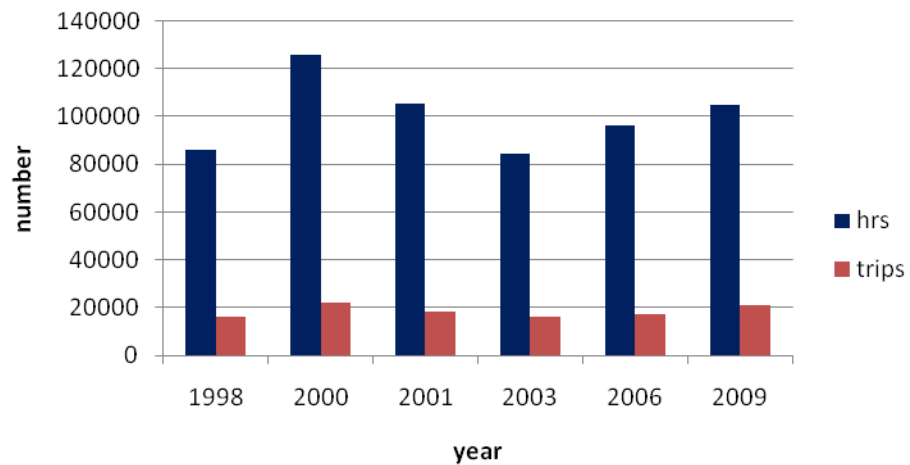
Angling pressure in 2009 was estimated at 104,057 hours resulting from 21,063 trips. This amounts to 20 hours of angling pressure per acre of reservoir. The average trip length was nearly 5 hours. May and June showed the highest angling pressure and accounted for 75% of the total pressure recorded in the April through October survey. May had the highest individual pressure at 42,236 hours. Anglers contacted in 2009 were from 63 of the 93 counties in Nebraska along with anglers representing nine other states. The local counties of Loup, Garfield, Custer, Hall and Valley accounted for nearly 40% of the anglers residence while the metropolitan areas of Douglas and Lancaster counties accounted for 10.3% of the anglers contacted.

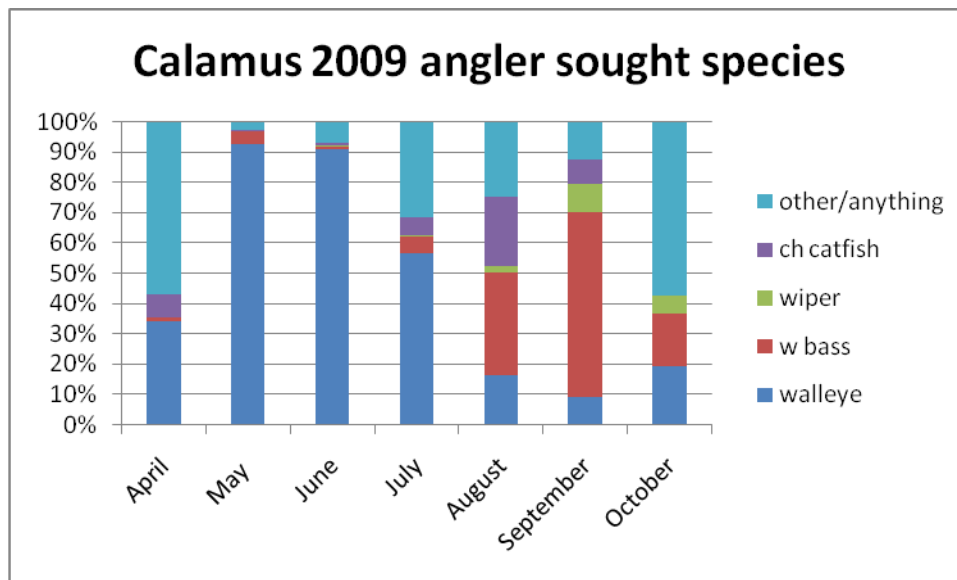
Anglers were primarily seeking walleye in May and June while white bass, wipers, and channel catfish gained in preference as the summer fishing season progressed. Angling hours and trips in 2009 was the second highest recorded with 2000 having the highest angling effort of conducted creel surveys. Fishing pressure in 2009 was similar to that found in 2001.

2009 Calamus Reservoir Fishing Effort



Calamus angler pressure

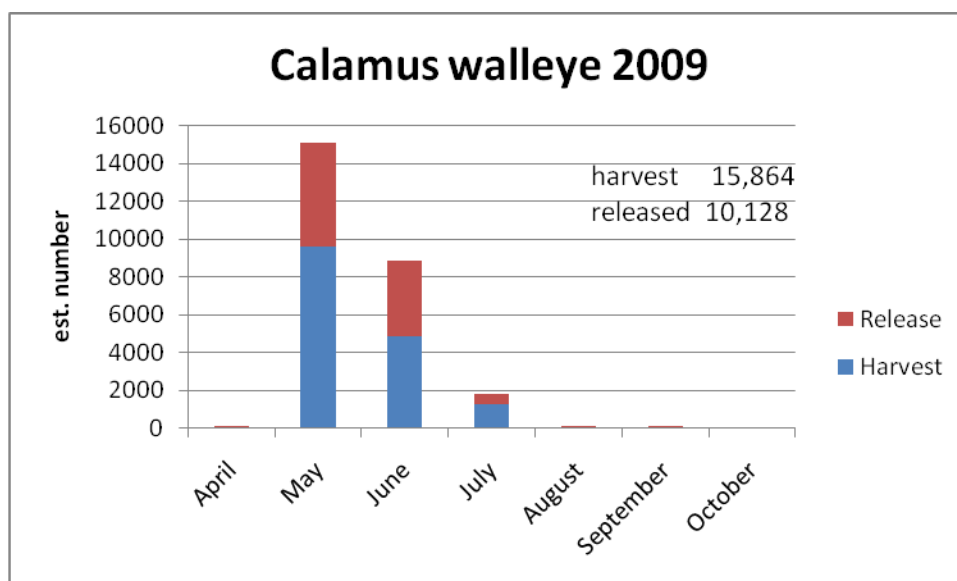




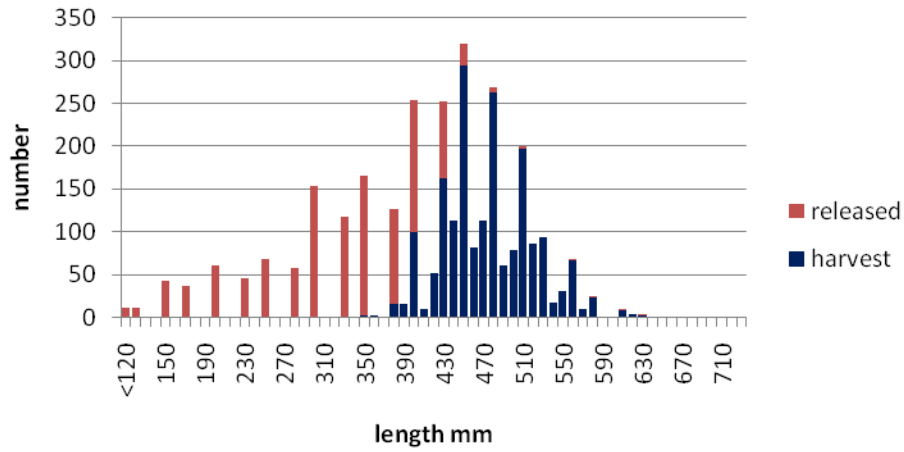
Walleye

Anglers had a total catch of 25,992 walleye in 2009 with an estimated harvest of 15,864. The best month for walleye harvest was May followed by June. Of the walleye harvested, 75% were over 18 inches in length. Anglers did take advantage of the regulation change allowing one fish in the daily bag to be between 15 and 18 inches in length. Nearly 4,000 fish harvested were between 15 and 18 inches. The walleye length frequency chart shows data for angler caught fish. Harvested fish were measured to the nearest millimeter while released fish lengths were supplied by the anglers and rounded to the nearest inch group. Released fish inch groups were then assigned the nearest median millimeter grouping for chart purposes.

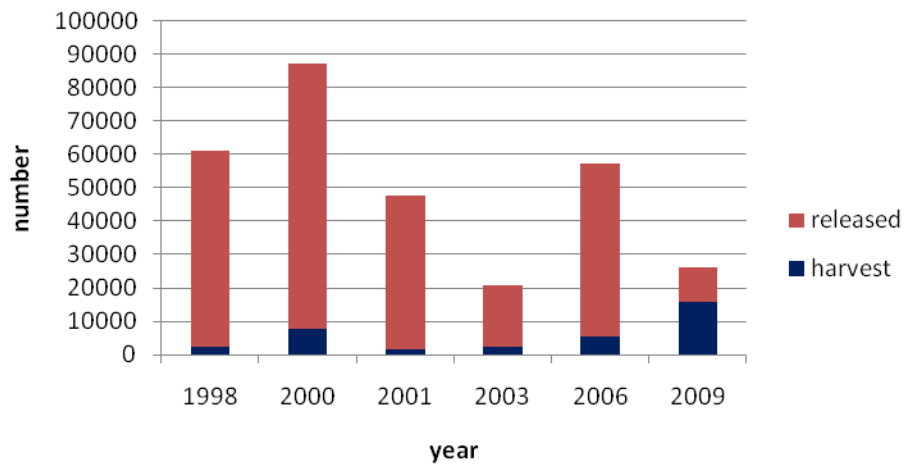
Walleye harvest in 2009 was the highest of any creel survey period. If just the fish over 18 inches were counted in the 2009 harvest, it still would be the highest of any creel period.



Calamus 2009 angler caught walleye

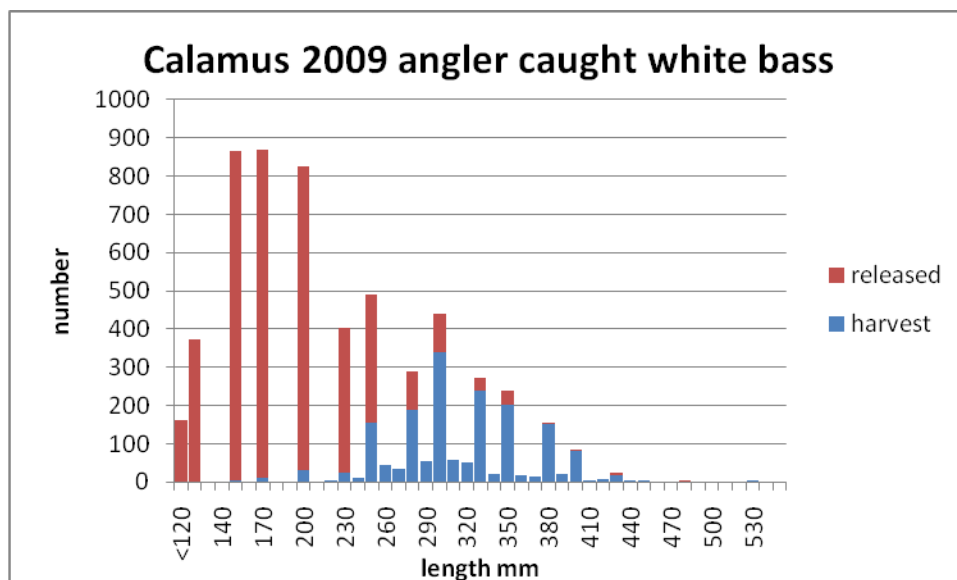
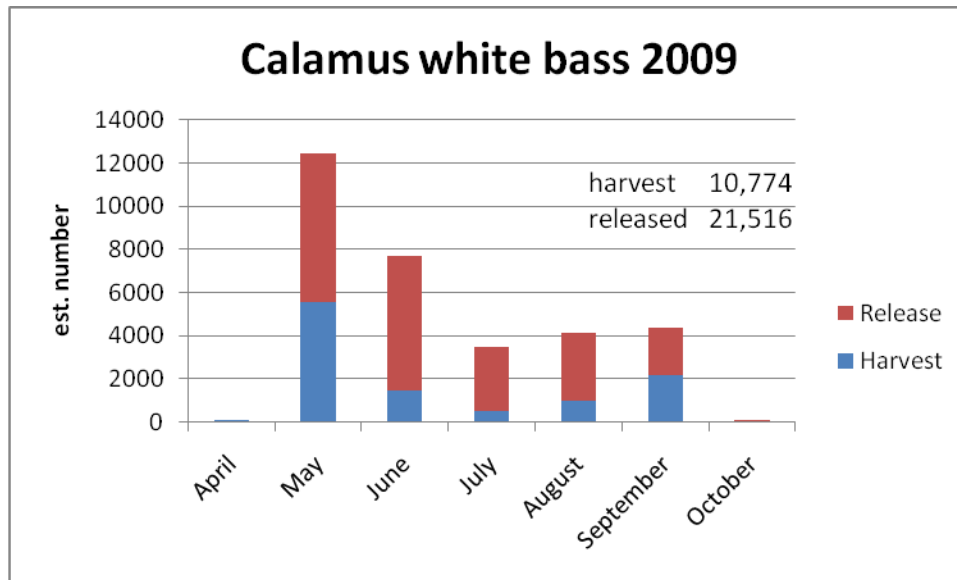


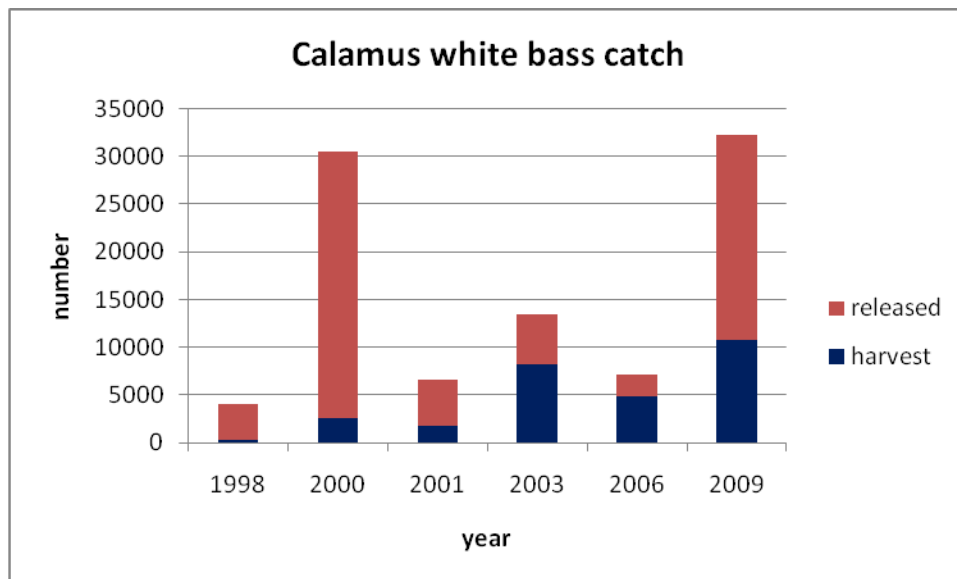
Calamus walleye catch



White Bass

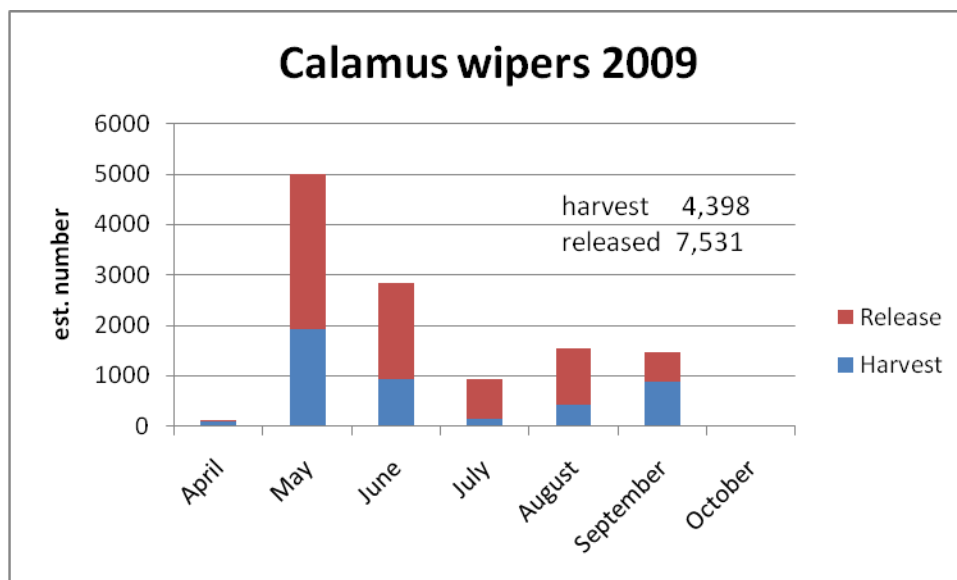
Angling for white bass was very good in 2009 with over 32,000 fish caught by anglers. Good reproduction the last couple of years has led to high numbers of smaller fish, many of which grew into a size range desirable for anglers to harvest in 2009. Still, nearly twice as many fish were released as were harvested in 2009. However, the estimated 10,774 white bass harvested represents the highest harvest recorded for white bass for any of the Calamus creel surveys. May was by far the best month for white bass catch and harvest followed by June.

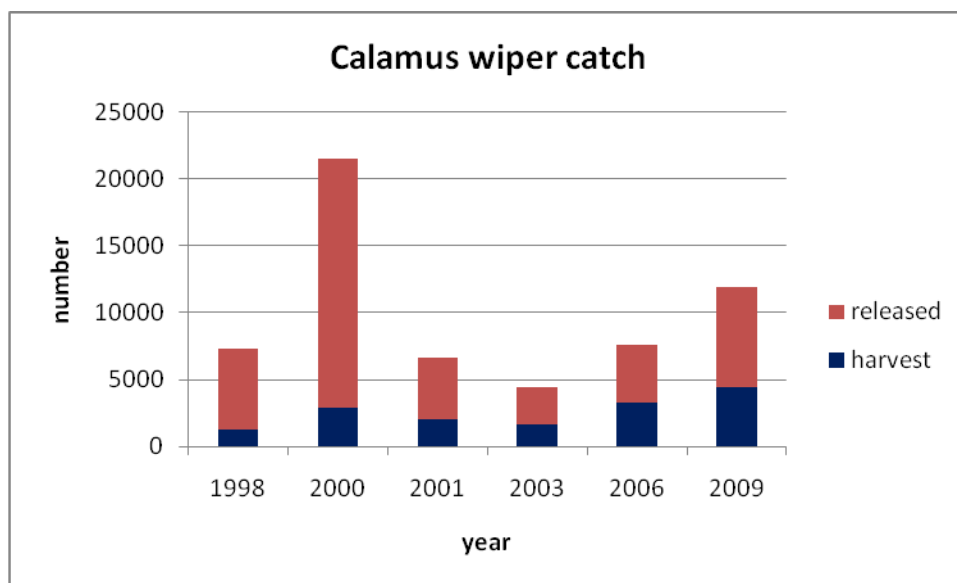
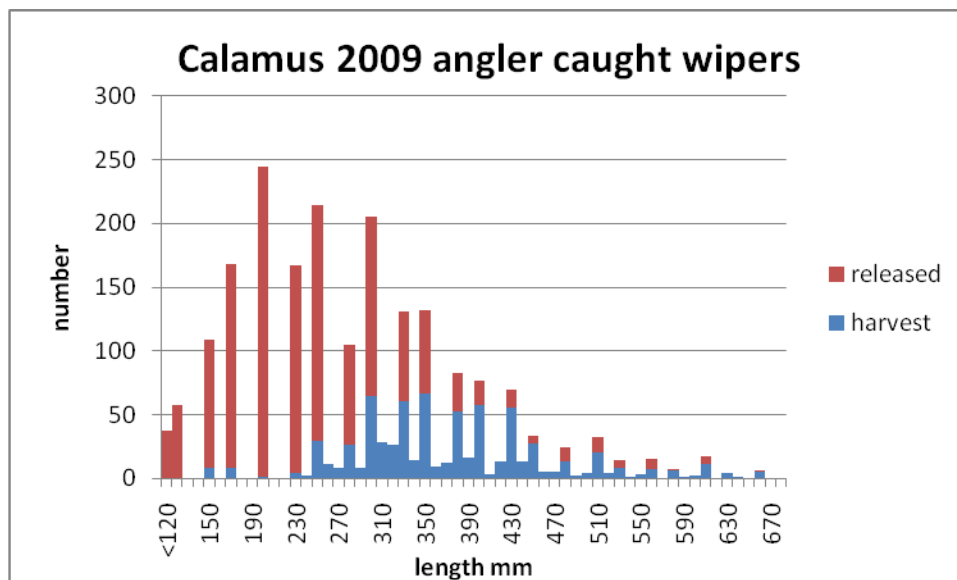




Wipers (white bass X striped bass hybrid)

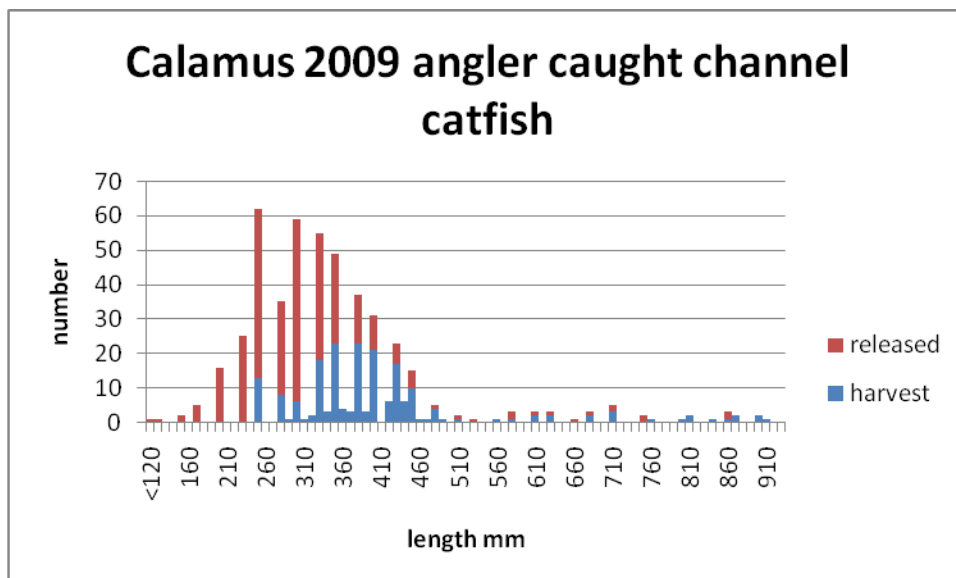
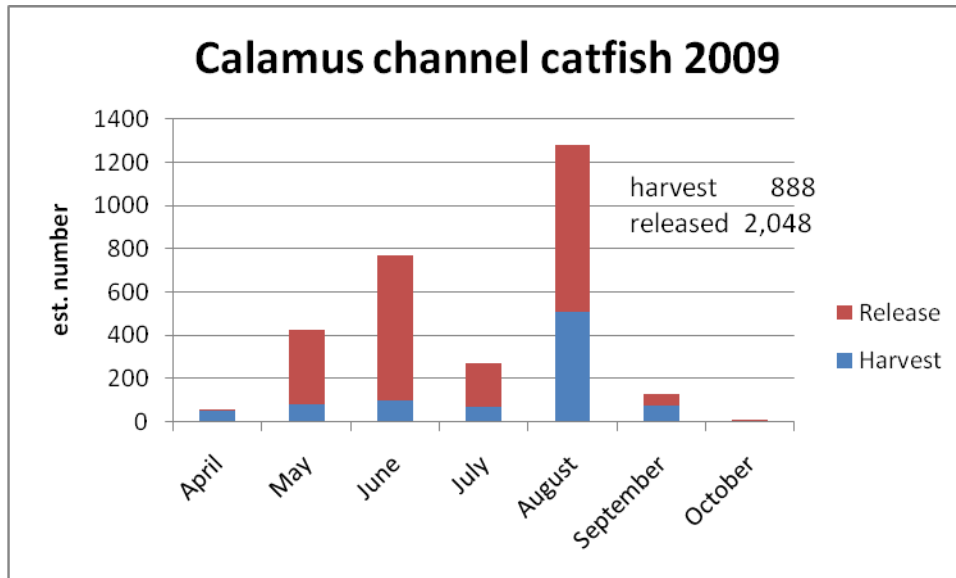
Anglers had a very good year fishing for wipers in 2009 with the second highest catch recorded from creel surveys and the highest harvest recorded. In all, an estimated 4,398 wipers were harvested with an additional catch and release of 7,531 for a total catch in 2009 of 11,929. Some quality fish are present with about 15% of the harvest being over 18 inches in length and about 10% over 20 inches. Anglers caught wipers up to nearly 27 inches in length. Once again, May and June had the highest catch for wipers.

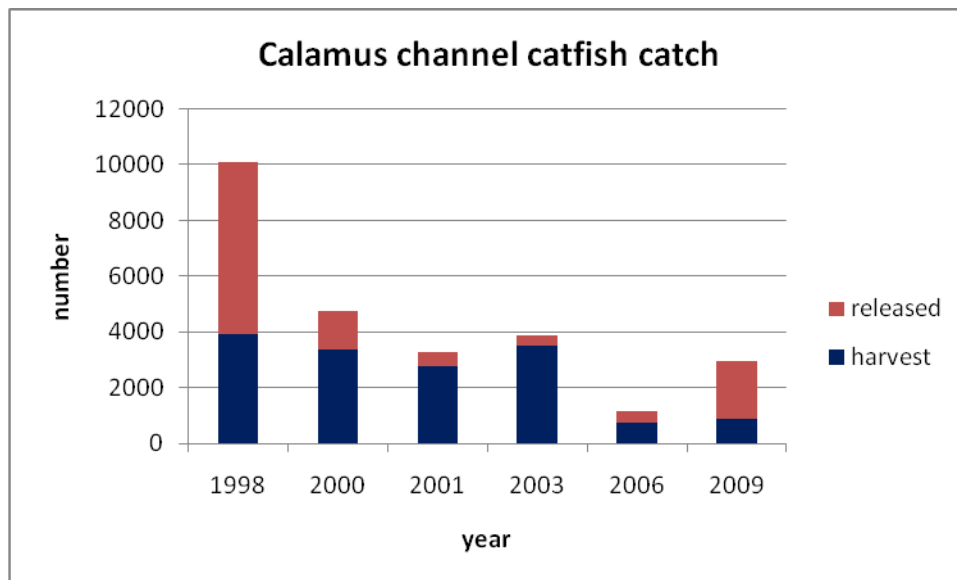




Channel Catfish

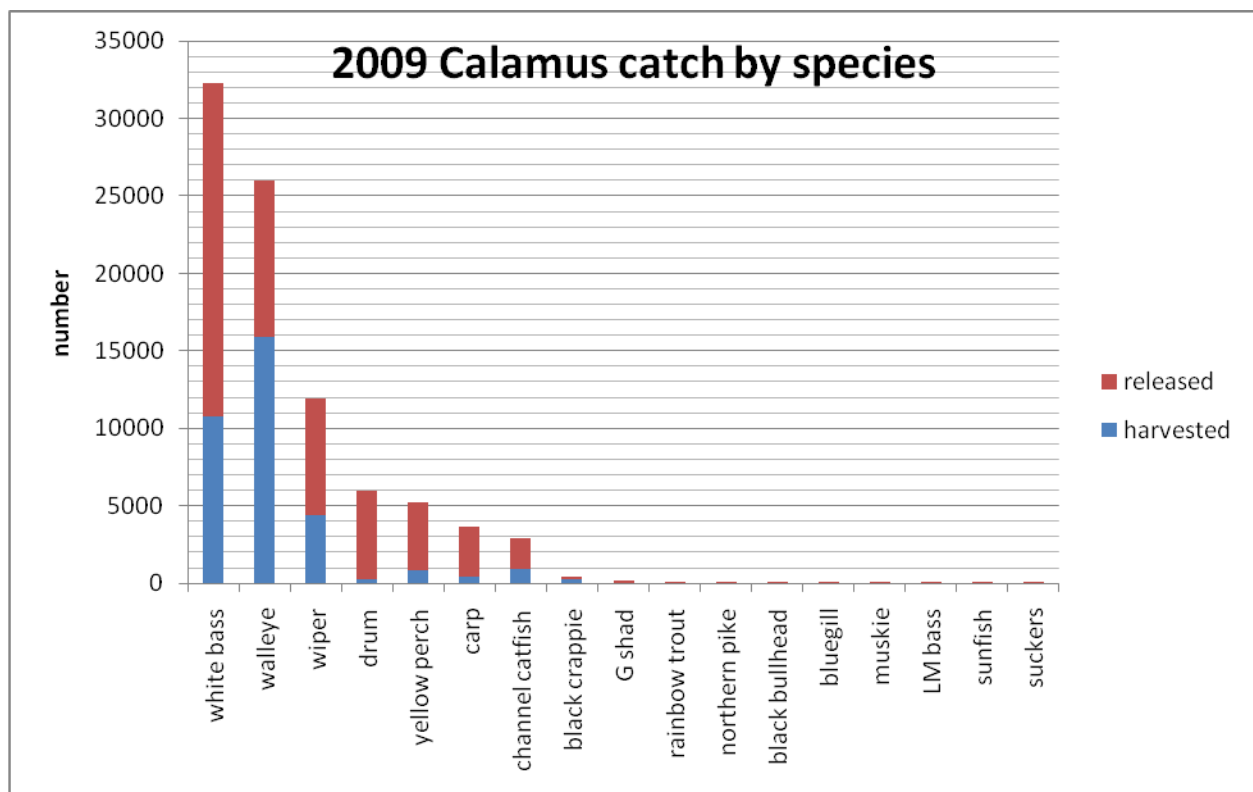
In contrast to the other major sport fish species, catfish anglers at the Calamus in 2009 did not have a particularly good year. In fact, the 2009 creel had the second lowest catfish catch of any creel surveys conducted at the reservoir. An estimated total of 2,936 channel catfish were caught in 2009 with an estimated 888 harvested. Keep in mind that much of the catfish angling likely occurs at night and the current format for angler creel surveys is for daylight hours only so these catch and harvest numbers are likely underestimated. Although the channel catfish catch and harvest was low in 2009, some quality fish exist in the reservoir and were caught by anglers with about 5% of the catch over 30 inches in length with fish up to 36 inches in length.





Miscellaneous Species

An additional 13 verified species of fish were caught by anglers at the Calamus Reservoir in 2009. Eight species significantly contributed to the angler catch, the four species discussed above plus drum, yellow perch, common carp and crappie. The following graph indicates the ranking by species in order of total catch. The catch for common carp does not include 7,563 pounds taken in a carp tournament on August 1, 2009. By far, the most caught species in 2009 were white bass, walleye, and wipers.



Gracie Creek Pond Summary

An angler creel survey was conducted at the Gracie Creek trout pond in 2009 in conjunction with the Calamus Reservoir creel survey. Angler counts were conducted on 20 randomly selected days per month from April through October. Angler interviews were conducted on count days when anglers were present. Total number of angler interviews was 139. The attached graphs will provide some general information resulting from the creel data.

It was estimated there were 5,250 angler hours expended with 2,497 trips. With a surface area of about 2 acres, this amounted to 2,625 hours per acre. Anglers fishing the lake were from 37 Nebraska counties with the highest county percentage from Custer and Douglas counties. The total rainbow trout catch was estimated at 4,348 fish with 2,968 harvested. The total number of trout stocked in Gracie Creek Pond from October of 2008 to August of 2009 (which covers the angler use period in this creel) was 4,700. The estimated harvest of 2,968 trout represents a 68% return on those fish. As you can see from the chart, the angler catch rate ranged from about 1 to over 2 fish per hour depending on the month. Angler CPUE did decrease with increasing angler pressure. Judging from the length frequency plot it appears the trout are growing and there is some carryover to larger sizes.

